



FIREHouse

The Northwest and Alaska Fire Research Clearinghouse
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Fire and Environmental Research Applications Team
Pacific Wildland Fire Sciences Laboratory

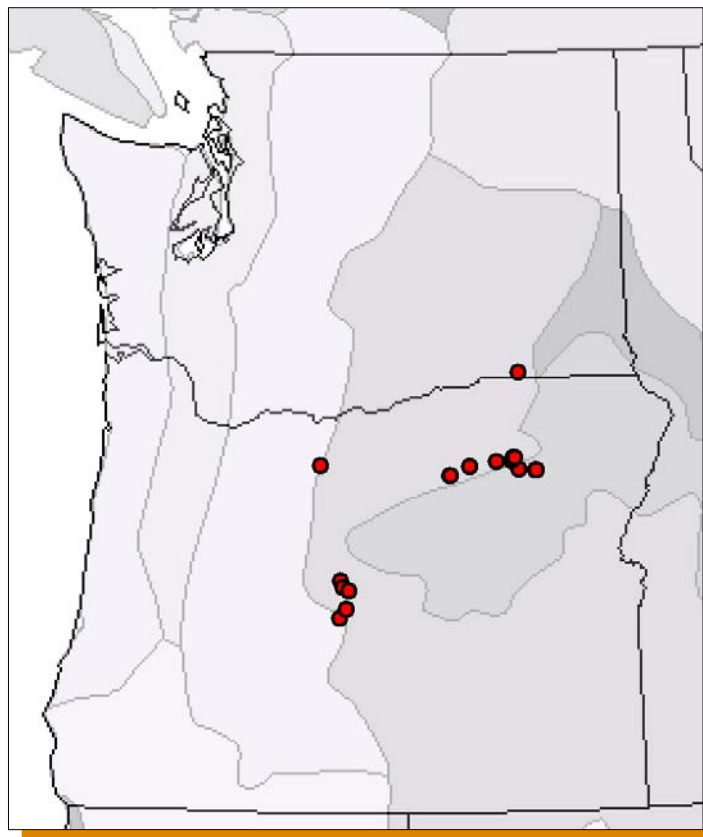
The Natural Fuels Photo Series Volume I: Mixed-Conifer With Mortality, Western Juniper, Sagebrush, and Grassland Types in the Interior Pacific Northwest

Photo Series for Major Natural Fuel Types in the United States

The Natural Fuels Photo Series currently includes ten volumes representing various regions of the United States. There are one to four series in each volume, each having four to 17 sites. Sites include standard, wide-angle, and stereo-pair photographs; and comprehensive fuel and vegetation inventory information. The Natural Fuels Photo Series is designed to help land managers appraise fuel and vegetation conditions in natural settings.

Volume I: Mixed-Conifer with Mortality, Western Juniper, Sagebrush, and Grassland Types in the Interior Pacific Northwest

The sites in this volume provide a basis for appraising and describing woody material, vegetation, and stand conditions in many areas across the interior Pacific Northwest. Sites photographed for the series in this volume were selected to show a range of conditions of several site attributes depending on the ecosystem type. The 17 mixed-conifer sites show ranges of down and dead woody material loading and insect-related tree mortality. The four western juniper and four sagebrush sites depict varying degrees of western juniper and sagebrush density, respectively. The four grassland sites represent a range of total biomass.



Technology Transfer

Ground inventory procedures that directly measure site conditions such as fuel loading and arrangement, vegetation structure, and composition exist for most ecosystem types and are useful when a high degree of accuracy is required. However, ground inventory is time consuming and expensive. Photo series can be used to make quick, easy, and inexpensive determinations of fuel quantities and stand conditions when less precise estimates are acceptable.

These photo series are important land management tools that can be used to ecologically assess landscapes through appraisal of living and dead woody material and vegetation biomass (that is,

fuels) and stand characteristics. Once an ecological assessment has been completed, stand treatment options, such as prescribed fire or harvesting, can be planned and implemented to better achieve desired effects while minimizing negative impacts on other resources.

The photo series is useful in several branches of natural resource science and management. Inventory data such as these can be used as inputs for evaluating animal and insect habitat, nutrient cycling, and microclimate. Fire managers will find these data useful for predicting fuel consumption, smoke production, fire behavior, and fire effects during wildfires and prescribed fires. In addition, the photo series can be used to appraise carbon sequestration, an important factor in predictions of future climate, and to link remotely sensed signatures to live and dead fuels on the ground. The Natural Fuels Photo Series continues to evolve and grow as land managers, researchers, and policy-makers identify ecosystems for which vegetation and fuel inventory data are needed.

For More Information about the Natural Fuels Photo Series

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About FIREHouse

FIREHouse is a collaboration between the Fire and Environmental Research Applications Team (FERA) of the USDA Forest Service Pacific Northwest Research Station, Pacific Wildland Fire Sciences Laboratory; the University of Washington; the National Park Service; the Bureau of Land Management – Alaska Fire Service; the US Fish and Wildlife Service; and the National Biological Information Infrastructure (NBII). Funding for FIREHouse has been provided by the Joint Fire Science Program (JFSP) and NBII. FIREHouse is coordinating efforts with the Fire Research and Management Exchange System (FRAMES) project team. Content on FIREHouse will provide substantial contributions to the FRAMES Northwest and Alaska Geo Portals.

For More Information about the FIREHouse Project

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